

THE BIODIVERSITY OF CLEVELAND COUNTY

Information regarding the rare species and community types of the county is derived from the findings of this inventory as well as information archived at the N.C. Natural Heritage Program (NC NHP) in Raleigh. Detailed database records for each rare species and community occurrence can be obtained on request through the NC NHP. The current status and presence of rare species and communities in the county can be obtained through the NC Natural Heritage Program internet website. The state rare plant and animal lists are also available on the website as downloadable files. Other information on rare species and natural community types, such as global distribution and rarity, can be obtained by accessing the Explorer database on the NatureServe website: www.natureserve.org/explorer/.

NATURAL COMMUNITY TYPES

Of the 100 counties in North Carolina, Cleveland County ranks in the upper third for numbers of natural community types. A natural community is defined as a distinct and reoccurring assemblage of populations of plants, animals, bacteria, and fungi naturally associated with each other and their physical environment. Natural communities can be recognized as distinct forest, rock outcrop, woodland, or wetland types. They are a distinct form of biodiversity, important in their own right and also important as “coarse filters” in conservation -- protection of natural communities can simultaneously protect uncommon or rare species that they support. The boundaries for biologically significant sites are usually based on the extent of exemplary natural communities. Although sites of biological significance are occasionally recognized simply for rare species, most contain examples of one to several community types. The quality, condition, extent, and rarity of natural communities typically have a strong influence on site significance.

Classification of communities into distinct types is necessary for describing them and planning their conservation. The community types used in this report correspond to the current state classification of community types. Table 1 contains the natural communities documented from Cleveland County, arranged in ecological groupings that reflect relationships between them. Ranks that indicate their global and in-state rarity are provided, with an explanation of ranks at the end of the table. Ranks for communities were developed by the N.C. Natural Heritage Program from information on their rarity range-wide (i.e., globally) and in state. For additional information on these communities and their floristics from a statewide perspective, refer to Schafale and Weakley (1990). The occurrences of these community types are described in the Site Descriptions section of this report.

A total of 19 natural community types are recognized for Cleveland County. Among these are a few that are globally rare. These include Low Elevation Rocky Summit communities present on exposed positions in Rollins/South Mountains Natural Area and Crowders Mountain State Park and Vicinity. Also rare are examples of the Spray Cliff type recorded from Rollins/South Mountains Natural Area and a small but unusual bluff/outcrop complex at First Broad Hop-hornbeam Natural Area that is classified as a Piedmont Mafic Cliff, but which could be an even rarer, previously unclassified type. The Piedmont/Coastal Plain Heath Bluff type is relatively rare in the surrounding region but it occurs at several locations on the First Broad River, Broad River, and Sandy Run drainages.